

SINGLE SOURCE SAFETY DOCUMENT

CHAPTER 3

COMPOSITE RISK MANAGEMENT

3-1. GENERAL.

- a. Composite Risk Management (CRM) is a leadership responsibility.

Commanders/supervisors at every level will employ Composite Risk Management to effectively control safety and occupational health risks to missions, personnel, equipment, and the environment.

b. Composite Risk Management is the best process for protecting the force. It is a tool to help leaders make sound decisions in a systematic and logical thought process to identify and control hazards. Through integration, leaders and individuals are empowered with the responsibility, authority, and accountability for Composite Risk Management decisions at the most appropriate level.

3-2. DEFINITIONS.

a. Composite Risk Management: CRM is a decision-making process used to mitigate risks associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness.

b. Risk Assessment: The identification and assessment of hazards. (See Risk Assessment Matrices at Figures 3-1 and 3-2.)

c. Risk Decision: The decision to accept or not accept the risk(s) associated with an action made by the commander/supervisor responsible for performing that action.

d. Residual Risk: The level of risk remaining after controls have been identified and selected for hazards that may result.

3-3. RESPONSIBILITIES.

a. Risk management is our most effective tool to protect the force by providing a systematic framework for identifying and controlling risks in all environments and operations. Commanders will accept no risk unless the potential benefit outweighs the potential loss. On Fort Hamilton the approval authorities are listed below:

- (1) Extremely high risk – MDW Commander
- (2) High risk – Garrison Commander
- (3) Moderate risk – Lieutenant Colonels or civilian equivalent in the appropriate chain-of-command.

(4) Low risk – Company Commanders or Division Chiefs or civilian equivalent in the appropriate chain-of-command.

b. All risk decisions will be based on the residual risk of an activity after applying appropriate control measures. However, composite risk management does not eliminate risk or the necessity for standards and will not be used to sanction or justify violating the law.

c. Commanders/directors:

(1) Establish risk approval procedures within their organization ensuring that risk assessments for high risk and extremely high risk training and operations on the installation are forwarded to the Installation Safety Office to be reviewed by the Garrison Commander and approved/disapproved or forwarded to higher as appropriate.

(2) Complete written risk assessments of all training and operations for inherent risk or hazards using the Composite Risk Assessment Work Sheet, DA Form 7566 (Figure 3-3). Medium risk decisions will be made by a Lieutenant Colonel or civilian equivalent in the appropriate chain-of-command.

(3) Ensure countermeasures (risk reduction actions) are developed and implemented.

(4) Ensure that risk assessments are reviewed with all affected parties prior to the start of training and operations to ensure conditions have not changed and to ensure that effective countermeasures are adhered to throughout the training and operation.

(5) Ensure personnel are trained and understand the Composite Risk Management Process.

(6) Establish alternate risk approval procedures within deployable units for use when training and operations are conducted away from the installation.

d. The Installation Safety Office:

(1) Provide technical assistance in analysis and preparation of risk assessments as needed.

(2) Review and analyze risk assessments for all high risk and extremely high risk operations and training and make recommendations to commanders/supervisors to reduce risk.

(3) Provide training support for Composite Risk Management to activities as needed.

(4) Provide onsite inspections to ensure compliance with this document.

e. Supervisors:

(1) Assess all training and operations for inherent risk or hazards.

(2) Reevaluate employee's job hazard analysis as required in conjunction with Composite Risk Management.

(3) Complete written risk assessment prior to conducting training and operations for inherent risk or hazards.

(4) Train subordinates in Composite Risk Management principles and techniques.

3-4. COMPOSITE RISK MANAGEMENT PRINCIPLES. Risk is the potential severity of a loss combined with the probability of an occurrence. The loss can be death, injury, property damage, or mission failure. Composite Risk Management identifies risks associated with a particular operation and weighs those risks against the overall value to be gained. The four principles of Composite Risk Management are:

a. Accept no unnecessary risk.

b. Accept risks when benefits outweigh costs.

c. Make risk decisions at the proper level consistent with Command policy.

d. Manage risk in the concept and planning stages whenever possible.

3-5. COMPOSITE RISK MANAGEMENT PROCESS. The Composite Risk Management process involves identifying and controlling hazards. The five steps represent a logical thought process from which users develop tools, techniques, and procedures for applying Composite Risk

Management in their areas of responsibility. It is a closed loop process applicable to any situation and environment.

a. Identify hazards. Identify hazards to the force or mission. Consider all aspects of current and future situations, environment, and known historical problems.

b. Assess the risk. Assess the risk to determine risk decisions. Develop the impact of each hazard in terms of potential loss and cost based on probability and severity. Ask these questions:

(1) What type of injury or equipment damage can be expected?

(2) What is the probability of an accident happening? (An expected minor injury combined with an unlikely probability equals low risk. An expected fatality combined with a frequent probability equals extremely high risk.)

c. Develop controls and make risk decisions. If you cannot eliminate the risk, you must control without sacrificing essential mission values. Some risks can be controlled by modifying tasks, changing location or route, increasing supervision, wearing protective clothing, changing time of operation, etc. A leader must usually decide between selecting from available controls, stopping the mission because the risk is too great or accepting risk because mission benefits outweigh potential loss.

d. Implement control measures. Put controls in place that eliminate the hazards or reduce their risks. Integrate procedures to control risks into plans, orders, SOPs, lesson plans, etc. Also ensure risk reduction measures are used during actual operations.

e. Supervise and evaluate. Enforce standards and controls; then evaluate the effectiveness of controls and adjust/update as needed. Make sure leaders know what controls are in place and what standards are expected; then hold those in charge accountable for implementation from start to finish. This is where accident prevention actually happens.

3-6. RISK ASSESSMENT. The Army uses two similar hazard assessment matrices.

a. The following risk assessment matrix from AR 385-10 is used when a hazard is identified in a normal workplace that could be covered under the Occupational Safety and Health Act standards (Figure 3-1).

b. The risk assessment matrix from Army doctrine used for operational hazards is at Figure 3-2.

3-7. REFERENCES.

a. FM 5-19, Composite Risk Management

b. AR 385-10, Army Safety Program

Risk Assessment Matrix

E = Extremely High Risk H = High Risk M = Moderate Risk L = Low Risk			PROBABILITY				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
S E V E R I T Y	CATASTROPHIC	I	E	E	H	H	M
	CRITICAL	II	E	H	H	M	L
	MARGINAL	III	H	M	M	L	L
	NEGLIGIBLE	IV	M	L	L	L	L

Figure 3-1

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely

Frequent – Occurs very often, known to happen regularly.

Likely – Occurs several times, a common occurrence.

Occasional – Occurs sporadically, but is not uncommon.

Seldom – Remotely possible, could occur at some time.

Unlikely – Can assume it will not occur, but not impossible.

SEVERITY		
Catastrophic	I	Complete mission failure or the loss of ability to accomplish a mission. Death or permanent total disability. Loss of major or mission-critical systems or equipment. Major property or facility damage. Severe environmental damage. Mission-critical security failure. Unacceptable collateral damage.
Critical	II	Severely degraded mission capability or unit readiness. Permanent partial disability or temporary total disability exceeding three months time. Extensive major damage to equipment or systems. Significant damage to property or the environment. Security failure. Significant collateral damage.
Marginal	III	Degraded mission capability or unit readiness. Minor damage to equipment or systems, property, or the environment. Lost days due to injury or illness not exceeding three months. Minor damage to property or the environment.
Negligible	IV	Little or no adverse impact on mission capability. First aid or minor medical treatment. Slight equipment or system damage, but fully functional or serviceable. Little or no property or environmental damage.

Figure 3-2

COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK			2a. DTG BEGIN		2b. DTG END		3. DATE PREPARED (YYYYMMDD)	
4. PREPARED BY								
a. LAST NAME			b. RANK		c. POSITION			
5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?	
Additional space for entries in Items 5 through 11 is provided on Page 2.								
13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)								
<input type="checkbox"/> LOW <input type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> EXTREMELY HIGH								
14. RISK DECISION AUTHORITY								
a. LAST NAME			b. RANK		c. DUTY POSITION		d. SIGNATURE	

ITEMS 5 THROUGH 12 CONTINUED:							
5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

Figure 3-3 (Cont)